



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,016	10/16/2003	Kenneth Sakichi Kondo	1814-19101	9151
23505	7590	10/20/2005	EXAMINER	
CONLEY ROSE, P.C.			KRAUSE, JUSTIN MITCHELL	
P. O. BOX 3267			ART UNIT	PAPER NUMBER
HOUSTON, TX 77253-3267			3682	

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/687,016

Applicant(s)

KONDO, KENNETH SAKICHI

Examiner

Justin Krause

Art Unit

3682

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 February 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>5/27/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed May 27, 2004 has been considered during examination.

Drawings

2. The drawings are objected to because the application number in the heading is incorrect. The drawings labeled Figures 1-3 are accepted as formal pending correction of the heading on the drawing sheets.

3. Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Figures 1 and 2 are shown in US Patent 4,231,671 to Makins, Jr.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended.

The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must

Art Unit: 3682

be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to because of the following informalities: The statement regarding Federally Sponsored Research or Development should be omitted from the specification if it is not applicable.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. The term "relatively large eccentric disc" in claim 1 is a relative term which renders the claim indefinite. The term "relatively large" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of

Art Unit: 3682

the scope of the invention. The claim does not provide a basis for the relative comparison. It is unclear how large the large eccentric disc is.

Claim 4 recites an "elongated cylindrical body". It is unclear whether this is making reference to the original elongated cylindrical body as presented in claim 1, or a second, new elongated cylindrical body.

Claim 6 recites a junction between said disc and said body. It is not clear which disc is being claimed, there are large and small discs.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 6-8, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Makins (US Patent 4,231,671).

With respect to claim 6, Makins shows an eccentric shaft having an elongated cylindrical body (10), at least one small eccentric disc (12,13,14) extending radially from said body, at least one concentric gear flange (15) extending radially from the body, a relatively large eccentric disc (18,19,20) attached to the small disc, the diameters of the discs related in that the center of the large disc describes a crank circle entirely within the small disc on rotation of the shaft and a junction between the disc and the body.

Art Unit: 3682

With respect to claim 8, Makins shows an eccentric shaft with a plurality of small discs spaced uniformly along the length of the shaft, with a large disc attached to each small disc and a gear flange located between two of the small discs.

With respect to limitations in claims 6-8, method limitations in claims drawn to the device have minimal patentable weight. Applicant is advised to pursue claims drawn to the method of manufacture if applicant believes the patentability of the invention lies in the method. Forging, shot-peening, shrink fitting, keying and stress relieving are method limitations.

"Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." (MPEP 2113 R-1)

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3682

11. Claims 1-5, 9 and 10, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Makins in view of Oliver (US Patent 1,557,767).

With respect to claim 1, Makins shows an eccentric shaft having an elongated cylindrical body (10), at least one small eccentric disc (12,13,14) extending radially from said body, at least one concentric gear flange (15) extending radially from the body, a relatively large eccentric disc (18,19,20) attached to the small disc, the diameters of the discs related in that the center of the large disc describes a crank circle entirely within the small disc on rotation of the shaft and at least one sleeve (16,17) fixed to the body.

With respect to claim 2, Makins shows an eccentric shaft with a plurality of small discs spaced uniformly along the length of the shaft, with a large disc attached to each small disc and a gear flange located between two of the small discs.

With respect to claims 3 and 9, the large discs have bearing retainers (22) at the outer circumference, the only torque on the shrink fit being internal friction of bearings mounted in the retainers. (See Claim 3)

With respect to limitations in claims 1-5 and 9, method limitations in claims drawn to the device have minimal patentable weight. Applicant is advised to pursue claims drawn to the method of manufacture if applicant believes the patentability of the invention lies in the method. Forging, shot-peening, shrink fitting, keying and stress relieving are method limitations.

"Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." (MPEP 2113 R-1)

Makins does not show sleeves affixed to the body having ports capable of transmitting fluid through a portion of the sleeve to an outer circumference of the sleeve to reduce friction, corrosion and vibration in the bearing as well as maintaining proper lubrication of the bearing.

Oliver teaches a shaft (4) with a sleeve (2), the sleeve having ports (8) capable of transmitting fluid through a portion of the sleeve to an outer circumference of the sleeve.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Makins and add ports to the sleeve as taught by Oliver. The motivation would have been to reduce friction, corrosion and vibration in the bearing as well as maintaining proper lubrication of the bearing.

Double Patenting

12. Applicant is advised that should claim 3 be found allowable, claim 9 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that

Art Unit: 3682

they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

95,174 shows a multi disc cam assembly

1,506,122 shows an eccentric shaft

6,901,845 shows a sleeve with ports for fluid passage

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin Krause whose telephone number is 571-272-3012. The examiner can normally be reached on Monday - Friday, 7:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on 571-272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3682

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMK

10/17/05



RICHARD W. RIDLEY
PRIMARY EXAMINER

SPE AU 3682